

Appl. No. 09/730,329
Amdt. dated September 27, 2005
Reply to Office Action of June 27, 2005

PATENT

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1-5. (Canceled)

6. (Currently amended) A compound capable of inhibiting β -secretase wherein the compound is of formula I:

R^1 -V-X-Y-Z-A-E-F (SEQ ID NO:59)

(I)

or a variant thereof in which any of V, A, E and F is/are replaced by a conservative substitution,

wherein V, A, E and F are valine, alanine, glutamine and phenylalanine, respectively;
~~phenylalanine respectively including conservative substitutions thereof;~~

R^1 is chosen from hydrogen, acetyl, t-butoxycarbonyl and carbobenzoyl;

X is chosen from methionine, phenylglycine, n-leucine (n-Leu), asparagine, phenylalanine, glycine and valine;

Z is chosen from valine, α -aminobutyric acid (Abu), phenylglycine (Phg) and alanine;
and

Y is statine, acha (cyclohexylmethyistatine) or phenylstatine (Phe-sta) wherein the phenyl group may optionally have mono or di-substitution chosen from the group consisting of Cl, F, Br, methyl and methoxy.

7. (Currently amended) The compound of claim 6, wherein said β -secretase inhibitor is chosen from the group consisting of R^1 -VMStaVAEF (SEQ ID NO:60); Ac-VPhgStaVAEF (SEQ ID NO:61); R^1 -V n-Leu-Sta-VAEF (SEQ ID NO:62); R^1 -VNStaVAEF (SEQ ID NO:63); R^1 -VFStaVAEF (SEQ ID NO:64); and R^1 -V MPhe-staVAEF (SEQ ID NO:65).

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8. (Original) The compound of claim 7, wherein in said β -secretase inhibitor R^1 is H or acetyl.

9. (Original) The compound of claim 8, wherein in said β -secretase inhibitor R^1 is acetyl.

10. (Previously presented) The compound of claim 9, wherein said β -secretase inhibitor is Ac-VMStaVAEF (SEQ ID NO:66).

11-12. (Canceled)

13. (Withdrawn-currently amended) A compound capable of inhibiting β -secretase wherein the compound is of formula II:

R^1 -E-V-X-Hyd-A-E-F (SEQ ID NO:67)

(II)

or a variant thereof in which any of V, A, E and F is/are replaced by a conservative substitution.

wherein V, A, E and F are valine, alanine, glutamine and phenylalanine, respectively
~~respectively including conservative substitutions thereof,~~

R^1 is chosen from hydrogen, acetyl, t-butoxycarbonyl and carbobenzoyl;

X is chosen from methionine, phenylglycine, n-leucine (n-Leu), asparagine, phenylalanine, glycine and valine;

and Hyd is hydroxyethylene.

14. (Withdrawn) The compound of claim 13 wherein said β -secretase inhibitor is R^1 -EVMHydAEF (SEQ ID NO:68).

15-21. (Canceled)